



SEQUENCE LISTING

<110> WEI, Ming-Hui et al.

<120> ISOLATED HUMAN ENZYME PROTEINS, NUCLEIC
ACID MOLECULES ENCODING HUMAN ENZYME PROTEINS, AND USES
THEREOF

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<141> 08-20-2003

<150> 09/820,004

<151> 03-29-2001

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<210> 4
 <211> 417
 <212> PRT
 <213> Homo sapiens

<400> 4

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Gln	Asp	Ser	Leu	Ser	Ser	Ser	Leu	Lys	Thr	Cys	Tyr	Lys	Tyr	Leu	Asn
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Gln	Thr	Ser	Arg	Ser	Phe	Ala	Ala	Val	Ile	Gln	Ala	Leu	Asp	Gly	Glu
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Met	Arg	Asn	Ala	Val	Cys	Ile	Phe	Tyr	Leu	Val	Leu	Arg	Ala	Leu	Asp
65					70					75					80
Thr	Leu	Glu	Asp	Asp	Met	Thr	Ile	Ser	Val	Glu	Lys	Lys	Val	Pro	Leu
				85					90					95	
Leu	His	Asn	Phe	His	Ser	Phe	Leu	Tyr	Gln	Pro	Asp	Trp	Arg	Phe	Met
			100					105					110		
Glu	Ser	Lys	Glu	Lys	Asp	Arg	Gln	Val	Leu	Glu	Asp	Phe	Pro	Thr	Ile
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Ser	Leu	Glu	Phe	Arg	Asn	Leu	Ala	Glu	Lys	Tyr	Gln	Thr	Val	Ile	Ala
	130					135					140				
Asp	Ile	Cys	Arg	Arg	Met	Gly	Ile	Gly	Met	Ala	Glu	Phe	Leu	Asp	Lys
145					150					155					160
His	Val	Thr	Ser	Glu	Gln	Glu	Trp	Asp	Lys	Tyr	Cys	His	Tyr	Val	Ala
				165					170					175	
Gly	Leu	Val	Gly	Ile	Gly	Leu	Ser	Arg	Leu	Phe	Ser	Ala	Ser	Glu	Phe
			180					185					190		
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Leu	Phe	Leu	Gln	Lys	Thr	Asn	Ile	Ile	Arg	Asp	Tyr	Leu	Glu	Asp	Gln
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Lys	Lys	Leu	Gly	Asp	Phe	Ala	Lys	Pro	Glu	Asn	Ile	Asp	Leu	Ala	Val
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Gln	Cys	Leu	Asn	Glu	Leu	Ile	Thr	Asn	Ala	Leu	His	His	Ile	Pro	Asp
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Val	Ile	Thr	Tyr	Leu	Ser	Arg	Leu	Arg	Asn	Gln	Ser	Val	Phe	Asn	Phe
		275					280					285			
Cys	Ala	Ile	Pro	Gln	Val	Met	Ala	Ile	Ala	Thr	Leu	Ala	Ala	Cys	Tyr
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Asn	Asn	Gln	Gln	Val	Phe	Lys	Gly	Ala	Val	Lys	Ile	Arg	Lys	Gly	Gln
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Ala	Val	Thr	Leu	Met	Met	Asp	Ala	Thr	Asn	Met	Pro	Ala	Val	Lys	Ala
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Ile	Ile	Tyr	Gln	Tyr	Met	Glu	Glu	Ile	Tyr	His	Arg	Ile	Pro	Asp	Ser
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	370					375					380				
Ile	Tyr	Leu	Ser	Phe	Val	Met	Leu	Leu	Ala	Ala	Leu	Ser	Trp	Gln	Tyr
385					390					395					400
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His

<210> 5
 <211> 417
 <212> PRT
 <213> Homo sapiens

<400> 5

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Gln	Asp	Ser	Leu	Ser	Ser	Ser	Leu	Lys	Thr	Cys	Tyr	Lys	Tyr	Leu	Asn
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Gln	Thr	Ser	Arg	Ser	Phe	Ala	Ala	Val	Ile	Gln	Ala	Leu	Asp	Gly	Glu
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Met	Arg	Asn	Ala	Val	Cys	Ile	Phe	Tyr	Leu	Val	Leu	Arg	Ala	Leu	Asp
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Thr	Leu	Glu	Asp	Asp	Met	Thr	Ile	Ser	Val	Glu	Lys	Lys	Val	Pro	Leu
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Leu	His	Asn	Phe	His	Ser	Phe	Leu	Tyr	Gln	Pro	Asp	Trp	Arg	Phe	Met
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Glu	Ser	Lys	Glu	Lys	Asp	Arg	Gln	Val	Leu	Glu	Asp	Phe	Pro	Thr	Ile
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Ser	Leu	Glu	Phe	Arg	Asn	Leu	Ala	Glu	Lys	Tyr	Gln	Thr	Val	Ile	Ala
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Asp	Ile	Cys	Arg	Arg	Met	Gly	Ile	Gly	Met	Ala	Glu	Phe	Leu	Asp	Lys
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His	Val	Thr	Ser	Glu	Gln	Glu	Trp	Asp	Lys	Tyr	Cys	His	Tyr	Val	Ala
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Gly	Leu	Val	Gly	Ile	Gly	Leu	Ser	Arg	Leu	Phe	Ser	Ala	Ser	Glu	Phe
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Val	Ile	Thr	Tyr	Leu	Ser	Arg	Leu	Arg	Asn	Gln	Ser	Val	Phe	Asn	Phe
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Cys	Ala	Ile	Pro	Gln	Val	Met	Ala	Ile	Ala	Thr	Leu	Ala	Ala	Cys	Tyr
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Gln	Asn	Leu	Pro	Asn	Cys	Gln	Leu	Ile	Ser	Arg	Ser	His	Tyr	Ser	Pro
	370					375					380				
Ile	Tyr	Leu	Ser	Phe	Val	Met	Leu	Leu	Ala	Ala	Leu	Ser	Trp	Gln	Tyr
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His

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<212> PRT
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<400> 6
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35 40 45
Gln Thr Ser Arg Ser Phe Ala Ala Val Ile Gln Ala Leu Asp Gly Glu
50 55 60
Met Arg Asn Ala Val Cys Ile Phe Tyr Leu Val Leu Arg Ala Leu Asp
65 70 75 80
Thr Leu Glu Asp Asp Met Thr Ile Ser Val Glu Lys Lys Val Pro Leu
85 90 95
Leu His Asn Phe His Ser Phe Leu Tyr Gln Pro Asp Trp Arg Phe Met
100 105 110
Glu Ser Lys Glu Lys Asp Arg Gln Val Leu Glu Asp Phe Pro Thr Ile
115 120 125
Ser Leu Glu Phe Arg Asn Leu Ala Glu Lys Tyr Gln Thr Val Ile Ala
130 135 140
Asp Ile Cys Arg Arg Met Gly Ile Gly Met Ala Glu Phe Leu Asp Lys
145 150 155 160
His Val Thr Ser Glu Gln Glu Trp Asp Lys Tyr Cys His Tyr Val Ala
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Gly Leu Val Gly Ile Gly Leu Ser Arg Leu Phe Ser Ala Ser Glu Phe
180 185 190
Glu Asp Pro Leu Val Gly Glu Asp Thr Glu Arg Ala Asn Ser Met Gly
195 200 205
Leu Phe Leu Gln Lys Thr Asn Ile Ile Arg Asp Tyr Leu Glu Asp Gln
210 215 220
Gln Gly Gly Arg Glu Phe Trp Pro Gln Glu Val Trp Ser Arg Tyr Val
225 230 235 240
Lys Lys Leu Gly Asp Phe Ala Lys Pro Glu Asn Ile Asp Leu Ala Val
245 250 255
Gln Cys Leu Asn Glu Leu Ile Thr Asn Ala Leu His His Ile Pro Asp
260 265 270
Val Ile Thr Tyr Leu Ser Arg Leu Arg Asn Gln Ser Val Phe Asn Phe
275 280 285
Cys Ala Ile Pro Gln Val Met Ala Ile Ala Thr Leu Ala Ala Cys Tyr
290 295 300
Asn Asn Gln Gln Val Phe Lys Gly Ala Val Lys Ile Arg Lys Gly Gln
305 310 315 320
Ala Val Thr Leu Met Met Asp Ala Thr Asn Met Pro Ala Val Lys Ala
325 330 335
Ile Ile Tyr Gln Tyr Met Glu Glu Ile Tyr His Arg Ile Pro Asp Ser
340 345 350
Asp Pro Ser Ser Ser Lys Thr Arg Gln Ile Ile Ser Thr Ile Arg Thr

355						360						365					
Gln	Asn	Leu	Pro	Asn	Cys	Gln	Leu	Ile	Ser	Arg	Ser	His	Tyr	Ser	Pro		
370						375						380					
Ile	Tyr	Leu	Ser	Phe	Val	Met	Leu	Leu	Ala	Ala	Leu	Ser	Trp	Gln	Tyr		
385						390						395					
Leu	Ala	Thr	Leu	Ser	Gln	Val	Thr	Glu	Asp	Tyr	Val	Gln	Thr	Gly	Glu		
405						410						415					
His																	